

WHAT IS CLAIMED IS:

- 5 1. A method for screening compounds useful for the treatment of proliferative and differentiative disorders comprising contacting a compound with a cell or a cell extract expressing Skp2 and one or both of p27 and Cks1, and detecting a change in the activity of Skp2.
- 10 2. The method of Claim 1 wherein the change in the activity of Skp2 is detected by detecting a change in the interaction of Skp2 with either p27 or Cks1.
- 15 3. The method of Claim 1 wherein the change in the activity of Skp2 is detected by detecting a change in the ubiquitination of p27 or degradation of p27 or Cks1.
- 20 4. A method for screening compounds useful for the treatment of proliferative and differentiative disorders comprising adding a compound in a purified system containing Skp2 and one or both of p27 and Cks1, and detecting a change in the activity of Skp2.
- 25 5. The method of Claim 4 wherein the change in the activity of Skp2 is detected by detecting a change in the interaction of Skp2 with either p27 or Cks1.
- 30 6. The method of Claim 4 wherein the change in the activity of Skp2 is detected by detecting a change in the ubiquitination of p27 or degradation of p27 or Cks1.
- 35 7. A method for screening compounds useful for the treatment of proliferative and differentiative disorders comprising adding a compound in a purified system containing Skp2 and one or both of a polypeptide corresponding to the carboxy terminus of the human p27 chain having the sequence NAGSVEWTPKKPGLRRRQT with or without a phosphothreonine at position 187 and Cks1, and detecting a change in the activity of Skp2.
8. The method of Claim 7 wherein the change in the activity of Skp2 is detected by detecting a change in the interaction of Skp2 with either the polypeptide or Cks1.
9. The method of Claim 7 wherein the change in the activity of Skp2 is detected by detecting a change in the ubiquitination of the polypeptide or degradation of the polypeptide or Cks1.